City of Jefferson COMMUNITY DEVELOPMENT
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UNDERGROUND UTILITY POLICY

Boring in City Right of Way

General

The use of various trenchless technologies in close proximity to underground utilities must be done cautiously. Boring equipment can puncture other utilities or service lines. All underground utilities and service lines must be protected.

There are a number of measures available to trenchless installers to avoid damaging sewer lines and laterals and other utilities and service lines while boring, and each is described in the next section of this policy. Before trenchless installers conduct boring operations near sewer facilities and utilities, these measures will be used as precautionary steps so that trenchless conduits are not installed in a sewer line or damage underground utilities.

Pre-Construction Measures

Sufficient pre-construction measures must be performed to prevent trenchless lines from conflicting with existing utilities and service lines. The specific measures that are performed will vary for each boring operation depending on characteristics such as construction location, proximity to houses and buildings, availability of sewer records, etc. At a minimum:

- Visually check the job site for substructures such as sewer manhole covers, sewer vents, and clean-outs.
- Obtain maps and drawings of the sewer system from the City or other entity. Maps can provide valuable information that can assist in determining the proximity and depth near the bore path.
- Contact the, building owners, local plumbers, and other persons that can provide assistance with identifying the existence and location of sewer laterals and other service lines.
- Determine the approximate cover of sewer laterals by measuring the depth of the lateral at an accessible clean-out versus the depth of the sewer main at the street. Caution should be taken because a sewer lateral may not have consistent grade from the building entrance to the sewer main.
- Locate a sewer lateral by inserting a sewer tape into a clean-out. Identify the location and depth of the sewer tape with a locator by inducing a signal on the tape with the locator transmitter. Accessing a clean-out may require gaining access to a building.
- Locate private drain tiles, stormwater lines, irrigation systems, etc. on private property.

Construction Measures

- The trenchless installer shall complete a final inspection, along the drill path, to identify the location of marked and exposed utilities.
- Utilize test holes to observe the bore rods and reamer when crossing or moving parallel to sewer mains and laterals, or other underground utilities. Test holes shall be utilized if the drill head and reamer are anticipated to cross or operate within six (6) inches of a sewer lateral or main. Every effort should be made to maintain a separation of one (1) foot during boring operations.
- Cease all drilling operations if an unidentified or unanticipated resistance or sudden movement of the drill string is encountered. Particular care should be taken to ensure that sewer lines and laterals are not the cause of the disturbance. Proceed only after the source of the disturbance has been identified and/or eliminated.
- Utilize a “sewer listening device” that is designed to detect disturbances or damage to sewer facilities at the time they occur. Field testing of these devices has proven they will detect a disturbance; however, the disturbance may only last for a short duration. Also, the ability to hear a disturbance can be affected by surrounding traffic noise. It is important that the person monitoring the sewer for a disturbance be alert to any unusual noise and immediately communicate this information to the equipment operator. It is possible that the sewer disturbance that is detected will coincide along with a drill string resistance felt by the operator.
- Hang a door tag (see attached sample) at each home or business near where boring operations are conducted. The door tag will notify these individuals of the boring operation and make them aware that a bore can enter a sewer line on some rare occasions and cause a sewer problem.
- Send an informational letter to the local plumbers and operators of sewer cleaning businesses and notify them that a bore can enter a sewer line on some rare occasions, potentially causing a sewer problem. When extensive boring operations are being conducted in a town, the letter should include the general location(s) of the boring activity. An example letter is included in this policy.

Responding to Inquiries

The trenchless installer may receive an inquiry from a plumber, an operator of a sewer cleaning business, or an individual that suspects an underground utility may be installed in a sewer line. When this occurs, the trenchless installer (permit holder) should arrange a meeting for the purpose of identifying if the underground utility is installed in a sewer line. The gas line may be newly installed or it could have been installed during boring activities in previous years; therefore, care should be taken not to dismiss the inquiry simply because there has been no recent boring activity in the area.

Example Informational Letter

An information letter should be mailed annually to plumbers, sewer cleaning businesses and any others who may be involved in removing sewer blockages. Special mailings may also be sent to these individuals to identify when and where extensive boring operations are being performed.

Dear <<Title>> <<Last name>>:

<<Trenchless installer>> utilizes various boring technologies to install underground utilities. Despite the precautions that we take, on rare occasions a bore may puncture a sewer line permitting a gas line to be unknowingly installed within the sewer line. Most new gas lines are polyethylene (plastic) and can be punctured or severed during sewer line cleaning activities potentially allowing natural gas to enter a building.
<<Parent Utility>> requests that you contact us at <<phone number>> if you suspect that a gas line may have been installed in a sewer line.

Additionally, <<Parent Utility>> will be conducting extensive boring operations during the year in the following locations. If you receive any sewer problem complaints in these areas, please consider if a newly installed underground utility line is the possible cause of the blockage prior to performing sewer cleaning operations.

- <<Location Description 1>>
- <<Location Description 2>>

Thank you for your cooperation and support with this effort. Please contact <<Name>> at <<Phone Number>> if you have any questions or would like additional information.

Sincerely,

<<Contact Person>>
<<Title>>

Door Tag

ATTENTION!!

<<Trenchless Installer>> has installed a new underground utility near your home or business using underground boring equipment. The use of boring equipment minimizes property damage; however, despite the precautions we take, on some rare occasions the bore may enter a sewer line. If you experience a sewer blockage at any time after the completion of our construction, please notify us at <<phone number>> prior to contacting a sewer repair contractor.

<<Trenchless Installer>> has installed a new underground utility near your home or business using underground boring equipment.

The use of boring equipment minimizes property damage, however, despite the precautions we take, on rare occasions the bore may enter a sewer line.

If you experience a sewer blockage at any time after the completion of our construction, please notify us at <<phone number>> prior to contacting a sewer repair contractor.

<< Company Logo>>